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Neuromedin-U Polyclonal Antibody

Catalog # AP71251

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	P48645
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	19741

Additional Information

Gene ID	10874
Other Names	NMU; Neuromedin-U
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

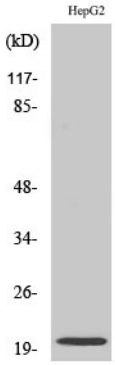
Name	NMU (HGNC:7859)
Function	[Neuromedin-U-25]: Multifunctional neuropeptide that acts via two G protein-coupled receptors, NMUR1 and NMUR2 (PubMed:15331768, PubMed:35440625). Functionally, is involved in pleiotropic roles, including regulation of feeding, energy balance, blood pressure and smooth muscle contraction (By similarity). Additionally modulates hormone release and inflammatory responses in a tissue- and receptor- dependent manner (PubMed:15585845, PubMed:33857254). Mechanistically, binding to NMUR1 or NMUR2 results in coupling of receptors to Galpha proteins, namely GNAQ/Gaq or GNA11/Ga11 and GNAI1/Gai subunits (PubMed:15331768). GNAQ/Gaq or GNA11/Ga11 coupling leads to the activation of a phospholipase C (PLC), which hydrolyzes PIP2 (phosphatidylinositol 4,5-bisphosphate) into DAG (diacylglycerol) and IP3 (inositol trisphosphate), and subsequent intracellular calcium mobilization via IP3 receptors on the endoplasmic reticulum (PubMed:15331768). GNAI1/Gai coupling inhibits forskolin-stimulated cAMP accumulation (PubMed:15331768). In pancreatic beta cells, regulates insulin secretion through NMUR1 coupled to GNAI2 and GNAO1, resulting in reduced intracellular Ca2+ influx and cAMP levels

	(PubMed:33857254). Through NMUR1 in Th2-type T cells, enhances type 2 cytokine secretion and modulates inflammatory responses via activation of PLC-calcineurin-MEK and PI3K signaling pathways (PubMed:15585845).
Cellular Location	[Neuromedin-U-25]: Secreted {ECO:0000250|UniProtKB:P12760}
Tissue Location	Expressed throughout the enteric nervous system with highest levels being found in the jejunum. Expressed in gastrointestinal tract (PubMed:7619205).

Background

Neuromedin-U-25: Ligand for receptors NMUR1 and NMUR2 (By similarity). Stimulates muscle contractions of specific regions of the gastrointestinal tract. In humans, NmU stimulates contractions of the ileum and urinary bladder.

Images



Western Blot analysis of various cells using Neuromedin-U Polyclonal Antibody diluted at 1：500

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.